

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P282412

Luminaire Tested: **LDA2B209030D010 EU2B20NFL259030 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209030D010 EU2B20NFL259030 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1466.4 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

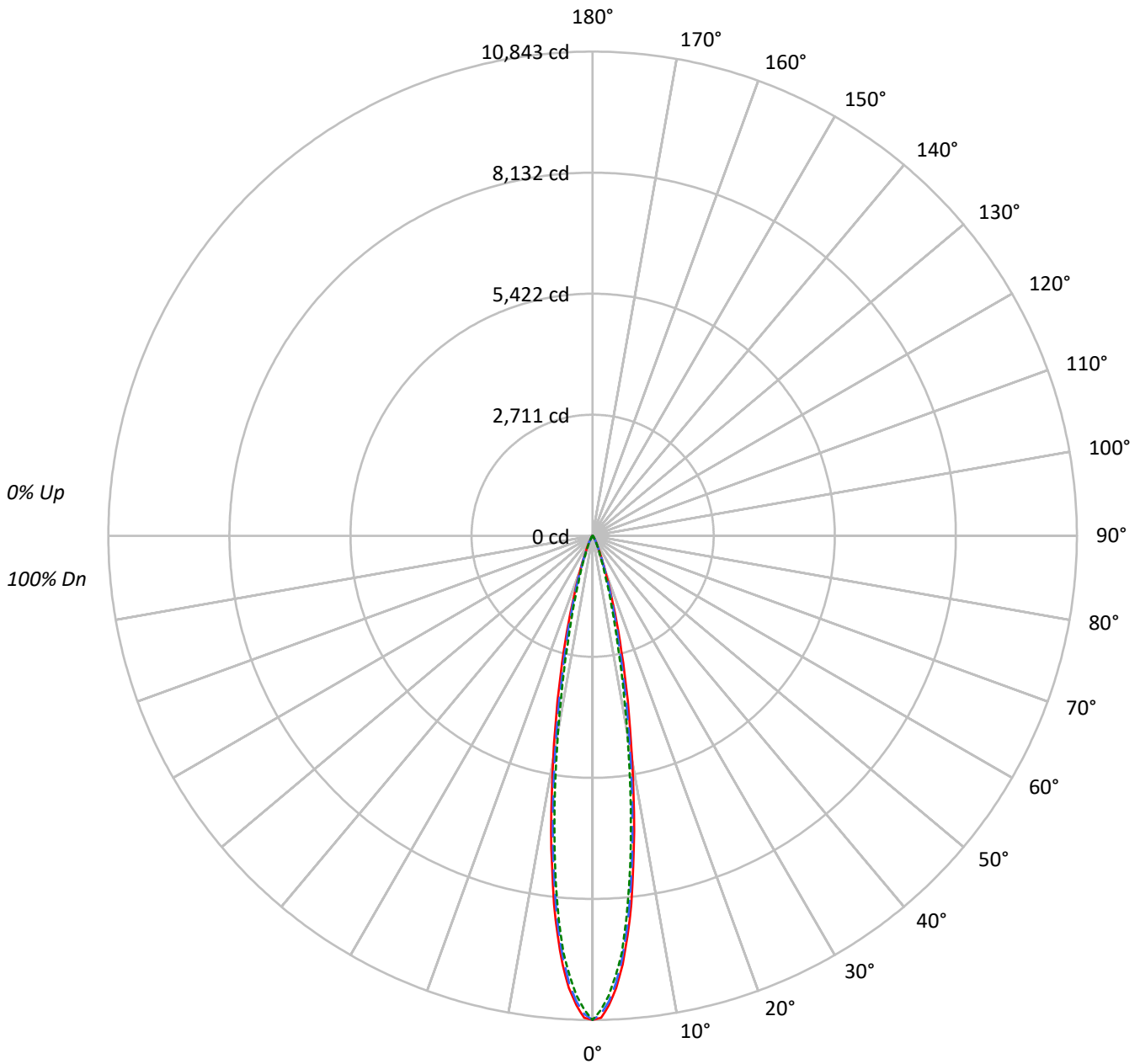
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5349571	5349571	5349571
5°	4451423	4369806	4281603
10°	2549751	2392646	2232986
15°	1134053	1007179	844040
20°	411409	386838	306457
25°	157975	147523	127000
30°	68134	63349	56228
35°	32222	32222	26681
40°	16165	16681	13460
45°	9349	8721	8163
50°	6447	5757	5757
55°	5075	3613	4301
60°	4144	2467	3256
65°	2918	1985	2918
70°	2452	1154	2452
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	705.2	48.1
10°-20°	570.7	38.9
20°-30°	137.6	9.4
30°-40°	35.1	2.4
40°-50°	10.5	0.7
50°-60°	4.5	0.3
60°-70°	2.2	0.1
70°-80°	0.7	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1413.6	96.4
0°-40°	1448.6	98.8
0°-60°	1463.6	99.8
0°-90°	1466.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1466.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10843	10843	10843	10843	10843	
5°	8988	8906	8824	8747	8645	727
15°	2220	2168	1972	1776	1652	633
25°	290	292	271	246	233	150
35°	54	54	54	48	44	37
45°	13	13	12	12	12	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10843.1	10843.1	10843.1	10843.1	10843.1
1°	10794.6	10719.3	10710.1	10757.0	10619.0
2°	10518.6	10465.1	10434.2	10461.8	10305.4
3°	10139.8	10088.0	10031.9	10032.8	9858.0
4°	9623.8	9582.8	9488.3	9459.9	9358.7
5°	8988.3	8905.5	8823.5	8746.6	8645.4
6°	8285.8	8178.7	8061.7	7947.1	7843.4
7°	7459.6	7388.5	7233.8	7077.4	6989.6
8°	6682.7	6568.1	6387.5	6191.8	6117.3
9°	5847.2	5765.3	5557.9	5330.4	5256.0
10°	5089.6	5004.3	4776.0	4522.6	4457.3
11°	4378.7	4298.4	4060.9	3795.0	3725.6
12°	3777.4	3663.7	3391.1	3160.3	3092.5
13°	3178.7	3100.9	2842.5	2614.2	2482.9
14°	2669.4	2605.0	2370.8	2170.1	2031.3
15°	2220.3	2167.6	1971.9	1776.2	1652.5
16°	1821.4	1788.8	1634.1	1445.1	1343.9
17°	1477.7	1447.6	1348.9	1175.0	1089.7
18°	1193.4	1189.2	1107.2	956.7	880.6
19°	981.8	980.1	904.8	778.6	715.8
20°	783.6	794.5	736.8	626.4	583.7
21°	638.9	644.8	598.8	515.1	476.7
22°	520.2	524.3	494.2	425.7	404.8
23°	426.5	429.0	403.9	352.9	334.5
24°	351.2	352.9	330.3	294.4	278.5
25°	290.2	291.9	271.0	245.9	233.3
26°	240.8	242.5	224.1	206.6	194.0
27°	199.9	203.2	184.8	173.9	160.6
28°	170.6	171.4	154.7	148.0	135.5
29°	139.7	144.7	130.5	124.6	115.4
30°	119.6	122.1	111.2	107.0	98.7
32.5°	79.4	81.1	76.1	72.8	66.1
35°	53.5	54.4	53.5	48.5	44.3
37.5°	36.8	36.8	37.6	31.8	30.1
40°	25.1	25.1	25.9	21.7	20.9
42.5°	18.4	18.4	17.6	15.1	15.1
45°	13.4	13.4	12.5	11.7	11.7
47.5°	10.9	10.0	9.2	9.2	9.2
50°	8.4	8.4	7.5	6.7	7.5
52.5°	6.7	6.7	5.9	5.9	5.9
55°	5.9	5.0	4.2	4.2	5.0
57.5°	4.2	4.2	3.3	3.3	4.2
60°	4.2	3.3	2.5	3.3	3.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.5	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.8	0.8	1.7
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







62.5°	3.3	2.5	2.5	2.5	2.5
65°	2.5	2.5	1.7	1.7	2.5



(END OF REPORT)